

TRANSACTIONS

OF THE

NEW YORK SURGICAL SOCIETY.

Stated Meeting, February 8, 1905.

The President, HOWARD LILIENTHAL, M.D., in the Chair.

SUPPURATING THROMBUS OF THE LATERAL SINUS.

DR. CHARLES H. PECK presented a boy, nine years old, who was admitted to Roosevelt Hospital, in the service of Dr. Brewer, on August 5, 1904. He was brought in by the ambulance, with the history of having fallen from a third-story window. His symptoms at the time led to the diagnosis of fracture of the base of the skull, with laceration of the brain. There was an escape of bloody fluid from the right ear.

The boy's symptoms gradually improved, and he was taken home on August 28, 1904. Some time later, there were signs of cerebral irritation. The discharge from the ear became purulent; there were fever, headache, and emaciation.

He was readmitted to the hospital on September 15, 1904, with a temperature of 103.2° F.; pulse, 128. There was marked cerebral irritability, with low delirium, and partial facial palsy on the right side. There were no ocular nor other paralyses; the pupils were equal; there was no discharge from the ear. There was marked localized tenderness over the right occipital region, midway between the mastoid and the occipital protuberance. There was no oedema. The mastoid itself was not tender or cedematous. Emaciation and loss of strength had been progressive, and were very marked. The leucocyte count was 35,000. A consulting neurologist diagnosed brain abscess in the temporo-sphenoidal or cerebellar region.

The patient was operated on September 16, under ether

anæsthesia. A large, curved flap, with its base upward, was turned up from the right occipital region, and the skull trephined just above the lateral sinus, midway between the mastoid and the occipital protuberance. This opening was then enlarged upward and laterally with the rongeur forceps. The dura over the temporosphenoidal lobe was incised. The brain appeared normal and pulsating. An exploring needle inserted in several directions through the temporosphenoidal lobe failed to find pus, and the opening in the dura was sutured with catgut. The opening in the skull was then enlarged downward over the cerebellum, which was also explored, but without incising the dura. An incision was then made directly into the sinus in the centre of the bony opening; it was found to be partly occluded by a thrombus, and posteriorly one or two drachms of thick, creamy pus welled up, followed by a rush of blood from the posterior part of the sinus. Free bleeding from the sinus anterior to the thrombus showed that the mastoid portion was not occluded. The sinus was thoroughly cleansed and packed with sterile gauze. A large piece of sterile gauze packing was placed over the bony opening for pressure, and the flap sutured with silkworm gut, and over this a firm starch bandage was placed. The operation consumed forty-five minutes, and the patient's condition was fair at its conclusion. His temperature promptly dropped, and remained below 100° F. after the first forty-eight hours, with a corresponding improvement in the pulse-rate. The leucocyte count, six days after the operation, was 12,000. The patient's mental condition improved steadily; he ate ravenously, and soon began to gain in weight.

The packing in the sinus was removed on the seventh day, under ether anæsthesia. There was no bleeding, but a little pus followed the tape. The wound was afterwards dressed and cleansed every second day. Suppuration gradually subsided without incident. The patient left the hospital on October 7, 1904, with the wound nearly healed. All his acute symptoms had subsided; his mental condition was much improved, and he had gained considerably in weight.

In reply to a question, Dr. Peck said he was inclined to connect the suppurating thrombus of the lateral sinus with the middle ear infection. There was no evidence of a fracture in any part of the skull that was exposed in the region of the sinus.

GENERAL PERITONITIS, WITH ENTEROSTOMY AND SECONDARY SUTURE OF THE INTESTINE.

DR. H. LILIENTHAL presented a man, thirty-nine years old, who was admitted to the Mount Sinai Hospital on September 30, 1904. His family history was negative, and his past history unimportant.

His present illness began two days before admission, with pain, localized in the epigastrium, nausea, and vomiting. After these initial symptoms he had a chill, lasting twenty minutes, and followed by fever. The symptoms were the usual ones of a severe abdominal infection. There were headache, anorexia, and constipation, with pain and tenderness localized in the epigastrium. His fever persisted, with occasional attacks of vomiting.

On admission, his abdomen was distended and tympanitic, with an area of movable dullness in the flanks. There was tenderness in the right and left inguinal regions, but this afterwards became localized in the epigastrium. A rectal examination was negative. The patient's temperature on admission was 105.8° F.; pulse, 140.

On account of the urgency of the symptoms, the abdomen was at once opened. This disclosed the presence of a considerable amount of turbid free fluid in the peritoneal cavity. The appendix was found to be perforated at its middle third. It was ligated and cut away, and its stump carbolized. Two cigarette drains were inserted, one into the pelvis, the other to the site of the appendix. The wound was not sutured, the edges being brought together with plaster.

An examination of the appendix showed that it was three inches long, and that its mucous membrane was completely gangrenous. A culture from the peritoneal fluid showed bacteria coli commune, and a spread from the fluid showed streptococci.

The patient reacted well from the operation, and his temperature dropped to 101.4° F. Forty-eight hours later the abdomen became distended; he began to vomit and hiccough, with evidences of absolute constipation. He was at once removed to the operating-room and an enterostomy done. The incision was made in the median line above the umbilicus, and a large quantity of purulent fluid was evacuated. The appendix wound was

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inspected and found to be normal. There were a number of adhesions between the coils of intestine, and one large coil, evidently jejunum, was lying transversely in the wound. This was opened; a drainage-tube was inserted and held in place by a purse-string suture.

Following this operation, the patient's condition greatly improved. There was a free discharge through the enterostomy wound. On October 5 the fistula was closed without any anæsthetic by means of half a dozen fine intestinal silk sutures, the external end being left open. On October 20 the epigastric wound was still discharging, while the appendix wound had almost healed. The patient was discharged cured on November 18.

Dr. Lilienthal said that the interesting feature of the case, aside from its general interest, was the method he had resorted to of closing the enterostomy wound by secondary sutures. It proved very successful in this instance. A small fistula persisted, through which there was a slight discharge of intestinal contents, but within six weeks the patient was practically well.

WIRE FILIGREE SUTURE FOR HERNIOPLASTY.

DR. H. LILIENTHAL presented a man, thirty years old, to show the result of operation for double inguinal hernia. That on the right side had existed for three years; that on the left side for one year. Both were easily reducible. Double hernioplasty was done simultaneously on January 11, 1905; that on the right side being done by Dr. Lilienthal, and that on the left by Dr. Joseph Wiener. On the right side, the usual Bassini operation was done without difficulty, the new wire cable being employed for the deep sutures. On the left side, however, on account of the extremely wide ring, it was absolutely impossible to bring the conjoined tendon to Poupart's ligament. In order to overcome this difficulty, the wire cable was used, the sutures being passed back and forth, thus making a sort of filigree, by which the hernial opening was satisfactorily closed. The wound healed without any trouble, and the patient made an uneventful recovery. It was this feature of the operation, Dr. Lilienthal said, to which he wished to call attention. The silver wire cable employed was about the size of No. 2 catgut; the individual strands being extremely fine

and like catgut, it could be tied into a surgeon's knot and manipulated with ease. The ends did not have to be twisted, but could be cut off close, and thus did not give rise to any irritation. It could be sterilized, and possessed all the advantages of ordinary silver wire, but was much more flexible. It was manufactured by Tiemann & Company.

DR. WILLIAM B. COLEY said he was sorry to hear of a new wire suture recommended in hernia. There had been observed at the Hospital for Ruptured and Crippled over thirty cases in which non-absorbable sutures employed in the treatment of hernia had been the cause of sinus formation at long periods after operation; in a goodly proportion of these, silver wire had been the offending material. In a recent paper in the *British Medical Journal*, Macewen had emphasized the disadvantage of wire as a suture material in these cases; and he showed that from a pathological stand-point it was unnecessary for the suture to remain unabsorbed longer than three or four weeks. In his article he cited five cases in which gold wire had been used, and in which the wire gave rise to serious trouble. In two of these cases strangulation occurred in the recurrent hernia, the loop of bowel being caught in the wire suture.

DR. LILIENTHAL said that, as a rule, in his operation for hernia, he employed chromicized catgut, and he did not wish to be understood as advocating the use of this silver wire as a routine measure. In the case he had presented, the silver wire was employed to close the hernial gap because it was impossible to bring the parts together. He had simply brought it forward because it was a distinct improvement over other forms of silver wire. Its availability, of course, was not limited to hernial operations.

SARCOMA OF THE OVARY.

DR. BENJAMIN T. TILTON presented a woman, twenty-five years old, who was admitted to Bellevue Hospital on December 3, 1903. Her family history was negative. For several years she had suffered from an indefinite stomach and intestinal trouble, for which she had been treated at several dispensaries. Her menstruation had always been painful, and of about two days' duration.

Two months before admission she noticed a lump in the

lower part of the abdomen. It increased rapidly in size, becoming very noticeable, and causing her considerable discomfort. Examination on admission showed a well-marked tumor, which extended half-way to the umbilicus. No vaginal examination was made. Rectal examination showed the tumor to be pelvic in origin and attached to the uterus. It was hard and slightly nodular. A diagnosis of fibroid tumor of the uterus of rapid growth was made. There had been no perceptible loss of flesh or strength.

Operation, December 5, 1903. An incision revealed a solid, very vascular tumor of the right ovary, about the size of a child's head. It was not adherent to the intestines, but was attached to the posterior parietal peritoneum at one point over the ureter. This area, which was about the size of a silver dollar, was excised, and the gap drawn together, thus covering the ureter. There were no evidences of peritoneal metastases.

The patient made an uneventful recovery, but returned to her work too soon, and developed a ventral hernia, which was operated on October 26, 1904. At this second operation, the interior of the abdomen and pelvis were carefully explored, and no evidence of adhesions or metastases were found.

The ovarian tumor was submitted to Dr. James Ewing for examination, and he pronounced it an endothelial sarcoma.

Fourteen months had elapsed since the original operation, and there were no evidences of a recurrence. The patient apparently enjoyed perfect health, and had gained a great deal of weight.

DR. COLEY said he had seen five cases of sarcoma of the ovary, two in adults and three in children. In all of them the condition proved rapidly fatal, the patients usually dying in about a year.

USE OF GUTTA-PERCHA FOR NASAL BRIDGE.

DR. ROBERT H. M. DAWBARN presented a woman, twenty-five years old, who was brought by her physician from Rochester, New York, to consult Dr. Francis J. Quinlan, who in turn referred her to Dr. Dawbarn. The condition from which she suffered was a deformity of the nose resulting from a gradual absorption of the cartilage of the septum nasi, which had been going

on for the past three or four years, until, when first presented to Dr. Dawbarn, she had a very deep but narrow transverse sulcus, the skin at the bottom of which was almost level with her face. There was no specific history nor other cause that could be ascertained.

The patient was operated on by Dr. Dawbarn's method during the latter part of December, 1904. In order to remedy the peculiar deformity in this case, a piece of gutta-percha was moulded so that it resembled in shape a very broad wedding-ring cut in half. This was inserted between the mucous membrane and the skin, being pushed upward through an incision made for that purpose, well within the nostrils, until it rested beneath and overcame the depression that had existed, thus remedying that defect. On account of the lack of firm support of the gutta-percha bridge inserted in this case, its lower extremity at one end subsequently descended and protruded slightly through the incision. This was cut off, the rest of the ring lifted higher, and the patient made an uneventful recovery.

Dr. Dawbarn added that never before had he chanced to have for operation by his method so very narrow and deep a gap. Another time—and perhaps later in this case, should she return because of further cartilage absorption—he would make the narrow bridge resemble not a half wedding-ring so much as an inverted capital U, its broad bases resting on the periosteum of the bone upon either side. In that case even further cartilage absorption could not cause the skin to sink with it.

In addition to this patient's nasal defect, she had suffered, some years ago, from an attack of complete obstruction of the lower part of the larynx. This had followed severe ulceration in that region, resulting from the prolonged wearing of an intubation tube necessitated by an attack of laryngeal diphtheria. In order to relieve the dyspnoea, her physician performed tracheotomy two years ago, and the patient was still wearing the tracheotomy tube. Dr. Dawbarn found that the obstruction to breathing was due to the presence of a cicatricial membrane at the level of the cricoid cartilage, at which place the obstruction to air was almost complete. Her voice was at loudest a hoarse whisper. This structure was removed, after splitting the thyroid cartilage, which was necessary in order to discover where exactly in the larynx the trouble was situated; and the patient was now able

to articulate well, and could be heard by all the members in the room.

DR. LILIENTHAL said the result of the operation for the correction of the nasal defect was very beautiful and perfect. From the appearance of the defect as shown by the photograph taken prior to operation, he was inclined to suspect that the case was of specific origin.

DR. DAWBARN said he agreed with Dr. Lilienthal that the case was probably of specific origin, although there was no history of syphilis. The speaker said he had now shown before the Society, at various times, about eight or ten of these cases, that is, people in whom nasal defects had been remedied by the introduction of bridges or supports moulded from gutta-percha, and he hoped that others would give the method a trial. He considered that it had decided advantages, now well understood, over the use of paraffin injections.

EXTREME EQUINOVARUS.

DR. DAWBARN presented a man, thirty-four years old, who had suffered from talipes equinovarus since early childhood, probably as the result of anterior poliomyelitis. The condition was a very extreme one, as shown by the plaster cast made before operation. The heel was drawn upward some two inches, and the weight was borne, as the cast showed, upon the dorsum of the foot near its outer border. The patient could only walk with the aid of a pair of crutches, and about a hundred yards was his extreme daily limit, as he stated, from pain.

In order to remedy the deformity, the tendo-Achillis was first divided. The astragalus was then removed by an externally-placed semicircular incision, and, as the third step of the operation, a deformed third toe underlapping the sole was straightened. Last, for hallux valgus, the head of the first metatarsal bone was excised. These were, of course, all done at one operative session.

The result of the operation was excellent. The patient could now wear a ready-made shoe, and, as he demonstrated, could walk with comfort and without the aid of a stick or crutch.

DR. ROYAL WHITMAN said that the removal of the astragalus, especially indicated in the correction of paralytic talipes, of the character presented, gave additional stability to the foot. The excision of the head of the first metatarsal bone, together with

the base of the phalanx for the correction of hallux valgus, was unnecessarily radical.

The operation that seemed to him the most satisfactory was that of a convex incision over the inner aspect of the joint, and the excision of the projecting bone that caused the trouble, namely, the minor condyle of the first metatarsal. There was no sensitive scar if this operation were done properly. In most of these cases, the best operation was that which interfered least with the function of the part which relieved the discomfort and removed the deformity to the degree that the patient might wear a proper shoe. Provided the toe were straightened by vigorous stretching at the time of operation and were held straight during the period of repair, and if the arch of the foot were supported properly in cases of weakness, the treatment outlined was practically always successful.

PSEUDOCYST OF THE PANCREAS.

DR. IRVING S. HAYNES presented a man, twenty-five years old, a clerk by occupation, who was admitted to the hospital on November 16, 1904. His history dated back four years. At that time he had his first attack of pain over the right side, beneath the free border of the ribs, and passing up under the shoulder-blade. This pain was very severe, and was accompanied by sweating and vomiting of the stomach contents, and finally bile. He had never noticed stones in the fæces, and did not recall the color of the stools. Had never been jaundiced. He was treated by rest and morphine, and after his recovery could eat heartily.

During the past four years the patient had suffered from attacks similar to the above at irregular intervals. Since July, 1904, the pain had been more frequent and severe. During the attacks, he noticed that his urine was cloudy, but the pain was never referred to the scrotum or penis. The patient had lost flesh and strength. There were no night-sweats. For the past two days he had intermittent attacks of pain, agonizing in character, in the region of the gall-bladder.

Examination on admission. The patient was a thin, spare young man. The skin was not jaundiced. The tongue was coated. The whole upper right quadrant of the abdomen was tender to pressure, with the greatest point of tenderness at the

angle of the ribs and right rectus. There was no distention; no palpable tumor; the liver was not enlarged. The diagnosis considered probable was cholecystitis from occlusion of the cystic duct.

Operation, November 17, 1904. An incision, between four and five inches long, was made through the right rectus. Upon exploration, a cyst was found, apparently connected with the upper part of the pancreas. The stomach and ascending duodenum were displaced downward, and the latter to the right, the transverse colon was below. The gall-bladder contained a normal quantity of bile, and was to the right and above the cyst. The cyst was about three inches in diameter. The layers of omentum covering the cyst were torn through, and its contents aspirated. It was then explored through a small incision. Its cavity was smooth. Its base seemed to be over the upper part of the head of the pancreas, but there was an extension from this portion upward and backward to the spine. The cyst wall was so very deep and so closely surrounded by numerous important structures that its enucleation was considered inadvisable. It was accordingly fastened to the external wound, and the rest of the incision closed above and below. Healing was satisfactory. The cyst discharged for two months and then closed.

The fluid obtained from the cyst was of a pale, straw color; cloudy; faintly alkaline; specific gravity, 1005. It contained a trace of albumen; no sugar. It fermented sugar, split up fats, and digested proteids. It contained many leucocytes; no crystals or fibrin.

Tested again, December 10. No ferments could be found; color, pale straw; specific gravity, 1010; neutral reaction; no urea present.

UNDESCENDED TESTIS COMPLICATING HERNIA.

DR. JOHN B. WALKER presented three patients; first, a man, fifty-six years old, who never knew that he had a hernia until he reached the age of thirty-five. He was unable to wear a truss. An examination showed that there was but one testis in the scrotum, and when he was operated on for hernia, a small, undeveloped testis was found high up in the ring.

The second patient was a boy of five years of age, who had

a hernia for which he had worn a truss for two years. Examination showed a right-sided congenital hernia, with the right testis undescended, and in the inguinal canal. He was operated on last June, and the testis now occupies its normal place in the scrotum.

The third case was a boy of fifteen years of age, who had a hernia since he was five years of age. An examination made at the Hospital for Ruptured and Crippled showed that both testes were in the inguinal canals. He was operated on last April. The left testis has come down very well to the bottom of the scrotum, and the right one is in the upper half of the scrotum. Both have developed considerably since the operation. In both the transplantation of the testis has been satisfactory.

THE UNDESCENDED TESTIS IN RELATION TO HERNIA.

DR. JOHN B. WALKER read a paper with the above title.

DR. CHARLES N. DOWD said he had done many of these operations, and had found that the results differed exceedingly, according to the difficulty in drawing down the testis. This difficulty could not be attributed, in any of his cases, to the vas deferens, which could always be drawn out: it was in a measure due to the infundibulum fascia, but after that was divided the spermatic vessels usually proved the real obstacle to bringing the testis into its proper position. In some of these cases, although the testis could be brought below the pubes, it was very apt to retract. The speaker could recall several successful cases in which the testis remained in the scrotum and became almost normal in size; in other cases, the result was disappointing, because the testis retracted and finally atrophied. This seemed to correspond with the experience of other operators. If the operation, which consisted in dividing the spermatic vessels, could be done successfully, and if the results, as shown by a sufficiently large number of cases, proved satisfactory, it would certainly be a great advance in the treatment of this condition.

DR. WILLIAM B. COLEY said there was considerable difference of opinion among surgeons in regard to the treatment of undescended testis. Some differed as to when to operate, and Curling held the view that if the testis did not descend within one year, it would not descend at all. Dr. Coley said he did not agree with that statement. He could recall cases in which the

testis had descended at the fifth, sixth, or seventh year, and sometimes not until just before puberty. If the testis did not come down spontaneously, he was in favor of operating about the sixth or seventh year. The results in the cases that he had operated on, as regarded the position of the testis and its continued development, had been rather disappointing. In his earlier cases, the speaker said, he attempted to fasten the testis down; but he soon abandoned that method, and simply freed the cord so thoroughly that the testis could be brought to the bottom of the scrotum without much tension. In certain cases this was impossible, and in those instances retraction was apt to occur. He thought it was always wise to save the testis, whether it was functionally active or not,—and he had never sacrificed the testes in children. In two instances, however, in adults, he found it necessary to remove the gland,—one case being an abdominal retention and the other being a small atrophied testis in the perineum. He thought the danger of sarcomatous changes occurring in these misplaced organs had been very much exaggerated, although it did occur at times. He had operated upon sixty-seven cases of hernia associated with undescended testis, twenty in adults fifteen to forty years of age, and forty-seven in children four to fourteen years of age. There had been no relapse of the hernia in any case.

DR. DAWBARN said he had never seen a case of malignant degeneration in an undescended testis. A number of years ago, while investigating this general subject, especially an original paper in the *Journal of Physiology*, he thought by a Scotch writer, he found that when the testis was located *within* the peritoneal cavity, it was, in trial animals, atrophied, being adversely acted upon by the peritoneal secretion. But when this gland was buried *outside* of the peritoneal cavity,—that is, placed in a loose, comfortable bed made by blunt dissection between the subperitoneal fat and the abdominal muscles, with its cord neatly coiled about it for further protection,—he could not learn that any such bad result followed. About three or four years ago, Dr. William B. De Garmo, of this city, published an article in which he warmly advocated this plan of making a comfortable bed for the testis, as above described, in those undescended testis cases where it could not be drawn down into the scrotum, and also in ordinary inguinal hernia, if the patient would permit, as being more nearly

ideal than Bassini's plan (which in all other steps was followed), since there could now be a solid belly wall, with no canal and no rings.

Dr. Dawbarn said that ten years, or so, prior to Dr. De Garmo's publication he had published the same suggestion, and had practised it in a considerable number of instances, chiefly of hernia, but a few of cryptorchis with short cord. Never had any patient complained of pain in the testis so placed (well *above*, and never simply *behind* the hernial region); and he could see no reason to doubt that (speaking of hernial cases) the testis in question would continue to functionate as well in its new as in its old home. Dr. Dawbarn had never practised it, as to hernia, except in men of intelligence enough fully to comprehend the theory; and where from very thin and weak or fatty muscles he feared a relapse of the rupture, and hence a solid belly wall would be a distinct help towards radical cure.

RUPTURE OF THE SPLEEN; SPLENECTOMY; RECOVERY.

Dr. L. W. HOTCHKISS presented a spleen removed from a man, twenty-eight years old, who was admitted to Roosevelt Hospital on January 2, 1905. He had an attack of malarial fever in Cuba six years ago. He was addicted to the excessive use of alcohol, and for two days prior to his admission he had been drinking very heavily and had eaten nothing. He had no recollection of any fall or injury.

A few hours before his admission he was suddenly seized with a sharp pain in the left side of the abdomen. As he described it, he felt as though a knife was cutting him in two. He had vomited continuously since the onset of his attack, and had bled from the nose, but he denied having vomited blood. There was a slight contusion over the right tibia, with tenderness on pressure. He was in a condition of considerable shock on admission, with cold extremities, feeble pulse, and somewhat shallow respirations. The abdomen was rigid, with generalized tenderness.

In view of the acute onset of the attack, and in the absence of a history of injury, rupture of an internal viscus as a result of traumatism was not thought of, but a tentative diagnosis of a ruptured gastric or duodenal ulcer, or possibly acute pancreatitis, was made, and an immediate exploratory laparotomy was advised

and accepted. The patient's temperature on admission was 102.6° F.; pulse, 108; respirations, 36; leucocytosis, 24,000.

Operation. A four-inch median incision was made above the umbilicus. On incising the peritoneum, a large quantity of dark, fluid blood was evacuated, together with some clots. The stomach and duodenum were rapidly examined, but no perforation was found. In pulling up the fundus of the stomach, the hand dislodged a mass of clots from the splenic pouch, and an examination of the spleen revealed a laceration on its outer surface. The organ was drawn out through the abdominal wound, and, on account of the extent of the damage and the patient's collapsed condition, it was quickly removed, after ligating the vessels with catgut. The abdominal cavity was flushed with hot saline solution and the wound closed, without drainage.

On account of the extreme weakness of the patient, an intravenous infusion of normal salt solution was given during the progress of the operation. Following this, there was a material improvement in his pulse and general condition. While coming out of ether vomited dark blood. An examination of the excised spleen showed two lacerations upon its outer, convex surface, and a smaller one on the posterior surface. The peritoneum over the lacerations on the outer surface was torn and stripped back, while that overlying the posterior rupture was not broken, but was distended by a subperitoneal clot of considerable size. The spleen itself was somewhat enlarged, but of firm consistency. The lacerations over the convexity measured about two inches in length, and perhaps half an inch or more in depth. The directions of these tears was at right angles to the long axis of the spleen. The removal of the organ through the somewhat small median incision presented no difficulties, as there were no adhesions.

On the day following the operation, the patient's temperature fell to 101° F., and his condition improved. He vomited only once. He complained of thirst, and was given saline enemas. He was perfectly clear mentally, and stated positively that he had no recollection of a fall or injury.

On January 4 fluids by the mouth were well retained, and the abdominal cramp-like pains of which he complained were relieved by the insertion of a rectal tube. On the following day his bowels moved in response to an enema. His temperature was

almost normal; his further convalescence was uneventful, and he was discharged, cured, on January 25, 1905.

Repeated differential blood-counts made by Dr. Ditman on alternate days showed no material deviation from the normal. On January 4, the day after the operation, the blood-count showed polynuclears, 90 per cent.; lymphocytes, 9.6 per cent. Two days later, polynuclears, 83.6 per cent.; lymphocytes, 15.8 per cent.; eosinophiles, .4 per cent.; mast-cells, .2 per cent. On January 7 the red blood-count showed moderate poikilocytosis; the red blood-cells were pale; one normoblast was seen. On January 14 the white blood-cells numbered 22,400; the red cells, 3,840,000. The polynuclears, 78.2 per cent.; the lymphocytes, 20.8 per cent.; the eosinophiles, .2 per cent.; the mast-cells, .8 per cent.

The patient was seen a few days ago, and reported that he was enjoying excellent health.

RUPTURE OF THE LIVER.

DR. TILTON reported the case of a man who had been on a prolonged spree. When he was admitted to the hospital he was apparently very ill. There was no history of an injury, and no external signs of it. The liver was apparently enlarged, and this was thought to be due to the presence of an abscess. Upon opening the abdomen, a complete longitudinal rupture of the liver was found, the edges being necrotic and softened. This had apparently existed for several weeks.